San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

FEB 10 2015

Ms. Carrol Dugan
Saputo Cheese, USA
800 E Paige Ave.
Tulare, CA 92649

Re: Proposed Authority to Construct/Certificate of Conformity (Minor Mod)
District Facility # S-1203
Project # S-1144293

Dear Ms. Dugan:

Enclosed for your review is the District's analysis of an application for Authorities to Construct for the facility identified above. You requested that Certificates of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. Saputo Cheese USA has requested to increase in the quantity of Whey Protein Concentrate from the spray drier to 70 tons per day and increase the throughput of the whey powder storage silo to 70 tons per day.

After addressing all comments made during the 45-day EPA comment period, the District intends to issue the Authorities to Construct with Certificates of Conformity. Prior to operating with modifications authorized by the Authorities to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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FEB 10 2015

Thank you for your cooperation in this matter.

Sincerely,

Arnaud Marjollet
Director of Permit Services

Enclosures

cc: Gerardo C. Rios, EPA (w/enclosure) via email

San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review

Facility Name:	Saputo Cheese USA	Date:	January 28, 2015
Mailing Address:	800 E. Paige Ave.	Engineer:	Steve Davidson
	Tulare, CA 92649	Lead Engineer:	Allan Phillips AP SJVAPCD
Contact Person:	Carrol Dugan for Debra A. Guzman		
Telephone:	(562) 878-6243		FEB 2 5 2015
E-Mail:	Dugan, Carrol <CDugan@saputo.com>		
Application #(s):	S-1203-8-9 and S-1203-12-3		
Project #:	S-1144293		
Deemed Complete:	November 24, 2014		

I. Proposal

Saputo Cheese USA has requested Authority to Construct (ATC) permits for the increasing in the quantity of Whey Protein Concentrate (WPC) produced from S-1203-8 from 50 tons to 70 tons per day. In order to facilitate this increase in production, the throughput limit for the whey powder storage silo (S-1203-12) will be increased from 55 tons to 70 tons per day. The facility has previously exceeded the offset threshold for PM10. Therefore this increase in whey powder processing will require offsets. Saputo has identified Emission Reduction Credit (ERC) certificate N-1195-5 as the source of offsets.

Saputo Cheese USA has a Title V Permit. This modification can be classified as a Title V minor modification pursuant to Rule 2520, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. Saputo Cheese USA must apply to administratively amend their Title V permit.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 4002	National Emissions Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4201	Particulate Matter Concentration (12/17/92)
Rule 4202	Particulate Matter Emission Rate (12/17/92)
Rule 4301	Fuel Burning Equipment (12/17/92)
Rule 4305	Boilers, Steam Generators and Process Heaters – Phase II (8/21/03)
Rule 4306	Boilers, Steam Generators and Process Heaters – Phase III (10/16/08)
Rule 4309	Dryers, Dehydrators, and Ovens (12/15/05)
Rule 4320	Advanced Emission Reduction Options for Boilers, Steam Generators,

and Process Heaters Greater Than 5.0 MMBtu/hr (10/16/08)
Rule 4801 Sulfur Compounds (12/17/92)
CH&SC 41700 Health Risk Assessment
CH&SC 42301.6 School Notice
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The Facility is located at 800 E. Paige Avenue, Tulare, CA. The equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable.

IV. Process Description

The MSD 500 dryer uses indirect heat transfer and is suitable for products that must be free of combustion contaminants. Liquid raw material is introduced into the dryer through a high pressure feed system. A fine atomized spray of whey protein concentrate is mixed with air that is heated indirectly through a shell and tube heat exchanger. The atomized particles dry to a powder as they fall through the dryer coming to rest on the bottom of a static fluidized bed and are then discharged to the vibrofluidizer for further drying and cooling. The dryer's moisture-laden air is filtered through a baghouse, which traps any powder, and is then vented to atmosphere. The powder collected in the baghouse is discharged through a rotary valve and mixed back into the finished product powder.

The whey product will then be transferred to silos for storage until it is sent to the baggers for load out. The baggers will be connected to a dust collector for particulate control.

V. Equipment Listing

Pre-Project Equipment Descriptions:

S-1203-8-8: NIRO INC. MULTI-STAGE TYPE MSD 500 SPRAY DRYER WITH 15.0 MMBTU/HR NATURAL GAS/LPG DIRECT-FIRED MAXON ULTRA LOW NOX CROSSFIRE LINE BURNER AND 15.4 MMBTU/HR NATURAL GAS/LPG INDIRECT-FIRED TODD RAPID MIX ULTRA LOW NOX BURNER AND FGR, FEED SYSTEM INDIRECT HOT AIR SYSTEM, DRYING CHAMBER, EXHAUST AIR SYSTEM WITH FLUIDIZER ASSEMBLY, CYCLONE AND BAGHOUSE FILTER

S-1203-12-0: 26,162 GALLON (3,500 CU. FT.) WHEY POWDER STORAGE SILO "C" WITH BIN VENT, 3 HP POWDER SILO BIN DISCHARGER, 2 HP BIN VENT EXHAUST FAN, AND 1 HP CONVEY-THRU ROTARY AIRLOCK

ATC Equipment Descriptions:

S-1203-8-9: MODIFICATION OF NIRO INC. MULTI-STAGE TYPE MSD 500 SPRAY DRYER WITH 15.0 MMBTU/HR NATURAL GAS/LPG DIRECT-FIRED

MAXON ULTRA LOW NOX CROSSFIRE LINE BURNER AND 15.4 MMBTU/HR NATURAL GAS/LPG INDIRECT-FIRED TODD RAPID MIX ULTRA LOW NOX BURNER AND FGR, FEED SYSTEM INDIRECT HOT AIR SYSTEM, DRYING CHAMBER, EXHAUST AIR SYSTEM WITH FLUIDIZER ASSEMBLY, CYCLONE AND BAGHOUSE FILTER: INCREASE DAILY PRODUCTION OF WHEY PROTEIN CONCENTRATE TO 70 TONS/DAY

S-1203-12-3: MODIFICATION OF 26,162 GALLON (3,500 CU. FT.) WHEY POWDER STORAGE SILO "C" WITH BIN VENT, 3 HP POWDER SILO BIN DISCHARGER, 2 HP BIN VENT EXHAUST FAN, AND 1 HP CONVEY-THRU ROTARY AIRLOCK: INCREASE DAILY THROUGHPUT OF WHEY PROTEIN CONCENTRATE TO 70 TONS/DAY

Post Project Equipment Descriptions:

S-1203-8-9: NIRO INC. MULTI-STAGE TYPE MSD 500 SPRAY DRYER WITH 15.0 MMBTU/HR NATURAL GAS/LPG DIRECT-FIRED MAXON ULTRA LOW NOX CROSSFIRE LINE BURNER AND 15.4 MMBTU/HR NATURAL GAS/LPG INDIRECT-FIRED TODD RAPID MIX ULTRA LOW NOX BURNER AND FGR, FEED SYSTEM INDIRECT HOT AIR SYSTEM, DRYING CHAMBER, EXHAUST AIR SYSTEM WITH FLUIDIZER ASSEMBLY, CYCLONE AND BAGHOUSE FILTER

S-1203-12-3: 26,162 GALLON (3,500 CU. FT.) WHEY POWDER STORAGE SILO "C" WITH BIN VENT, 3 HP POWDER SILO BIN DISCHARGER, 2 HP BIN VENT EXHAUST FAN, AND 1 HP CONVEY-THRU ROTARY AIRLOCK

VI. Emission Control Technology Evaluation

S-1203-89:

The burner generates emissions of NOx, CO, VOC, PM10, and SOx from the combustion of natural gas. The existing burner is a low NOx unit which utilizes FGR.

Low-NO_X burners reduce NO_X formation by producing lower flame temperatures (and longer flames) than conventional burners. Conventional burners thoroughly mix all the fuel and air in a single stage just prior to combustion, whereas low-NO_X burners delay the mixing of fuel and air by introducing the fuel (or sometimes the air) in multiple stages. The TODD Rapid Mix Burner (RMB) design utilizes a parallel-flow air register with no moving parts. Combustion air is premixed with FGR enters the register where the entire mixture passes through a set of axial swirl vanes. These vanes, which are attached to a central gas reservoir, have hollow bases that are machined for gas injection. In fact, the swirl vanes actually are the gas injectors, which create the RMB's near perfect fuel/air mixture. Desired stoichiometry and this ideal fuel/air mixture minimize prompt NOx.

Thermal NOx is then minimized using FGR mixed with combustion air upstream of the burner to control flame temperature. The use of flue gas re-circulation (FGR) can reduce nitrogen oxides (NO_X) emissions by 60% to 70%. In an FGR system, a portion of the flue gas is re-circulated back to the inlet air. As flue gas is composed mainly of nitrogen and the products of

combustion, it is much lower in oxygen than the inlet air and contains virtually no combustible hydrocarbons to burn. Thus, flue gas is practically inert. The addition of an inert mass of gas to the combustion reaction serves to absorb heat without producing heat, thereby lowering the flame temperature. Since thermal NO_X is formed by high flame temperatures the lower flame temperatures produced by FGR serve to reduce thermal NO_X.

The powder conveying system which moves the whey product produces PM10 emissions. The system is enclosed to control these emissions and the air is exhausted through a series of cyclones and a baghouse.

S-1203-12-2

The storage of whey product in Silo C produces PM10 emissions. These emissions are controlled with a bin filter and the exhaust is vented by 2 hp fans.

VII. General Calculations

A. Assumptions

Only a change in process PM_{10} emissions are from the process are changing as a result of this project (i.e. no combustion emissions are changing). Therefore, combustions emissions will be taken from project S-1085358.

S-1203-8-9:

Only one burner can be operated at a time; therefore, emissions from both units will be calculated and the highest criteria pollutant emissions from either unit will be used in the calculations.

Pre-Project:

- Operating Schedule: 24 hrs/day, 365 days/year
- The manufacturer provides EF for PM_{10} from powder = 0.344 lb/ton
- Maximum daily productions of the Whey Protein Concentrate (WPC) shall not exceed 50 ton/day

Post-Project

- Operating Schedule: 24 hrs/day, 365 days/year
- The manufacturer provides EF for PM_{10} from powder = 0.344 lb/ton
- Maximum daily productions of the Whey Protein Concentrate (WPC) shall not exceed 70 ton/day (proposed by applicant)

S-1203-12-1:

Pre-Project:

- Operating Schedule: 24 hrs/day, 365 days/year

- PM10 emissions from bin vent filters shall not exceed 0.015 lb/ton of powder conveyed into silo (current PTO).
- Maximum quantity of dried whey powder conveyed into silo shall not exceed 55 tons/day

Post-Project

- Operating Schedule: 24 hrs/day, 365 days/year
- PM10 emissions from bin vent filters shall not exceed 0.015 lb/ton of powder conveyed into silo (current PTO).
- Maximum quantity of dried whey powder conveyed into silo shall not exceed 70 tons/day (proposed by applicant)

B. Emission Factors

S-1203-8-8:

Non-combustion PM10 emissions from baghouse shall not exceed 0.344 lb/ton (current PTO).

S-1203-12-1:

PM10 emissions are equal to 0.015 lb/ton of powder conveyed into silo (current PTO).

C. Calculations

1. Pre-Project Potential to Emit (PE1)

S-1203-8-8

Combustion Emissions:

Combustion Emissions		
Pollutant	Daily PE (lb/day)	Annual PE (lb/yr)
NO_X	8.7	2455
SO_X	1.1	401
PM_{10}	2.8	1022
CO	13.7	5001
VOC	2.0	730

Process Emissions:

$PE1_{PM10}$ = (0.344 lb/ton) * (50 tons/day) = 17.2 lb PM10/day
= (17.2 lb PM10/day) * (365 day/year) = 6278 lb PM_{10}/yr

Total Permit Unit Emissions:

Daily PE1 Emissions (Permit S-1203-8)			
Pollutant	PE1 Combustion	PE1 Process	PE1 Total
NO_X	8.7	0	8.7
SO_X	1.1	0	1.1
PM_{10}	2.8	17.2	20.0
CO	13.7	0	13.7
VOC	2.0	0	2.0

Annual PE1 Emissions (Permit S-1203-8)			
Pollutant	PE1 Combustion	PE1 Process	PE1 Total
NO_X	2455	0	2455
SO_X	401	0	401
PM_{10}	1022	6278	7300
CO	5001	0	5001
VOC	730	0	730

S-1203-12-3:

$PE1_{PM10}$ = (0.015 lb/ton) * (55 tons/day) = 0.8 lb PM10/day

= (0.8 lb PM10/day) * (365 day/year) = 292 lb PM10/yr

Pre-project Potential to Emit (PE1): S-1203-12-0		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
PM10	0.8	292

2. Post Project Potential to Emit (PE2)

S-1203-8-9:

Combustion:

As stated above, for Combustion PE2 = PE. PE2 for combustion is listed on the table below:

Maximum Permitted Combustion Emissions		
Pollutant	Daily PE (lb/day)	Annual PE (lb/yr)
NO_X	8.7	2455
SO_X	1.1	401
PM_{10}	2.8	1022
CO	13.7	5001
VOC	2.0	730

Process:

$PE2_{PM10}$ = (0.344 lb/ton) * (70 tons/day) = 24.1 lb PM_{10}/day
= (24.1 lb PM10/day) * (365 day/year) = 8,797 lb PM_{10}/yr

Total Permit Unit Emissions:

Daily PE2 Emissions (Permit S-1203-8)			
Pollutant	PE2 Combustion	PE2 Process	PE2 Total
NO_X	8.7	0	8.7
SO_X	1.1	0	1.1
PM_{10}	2.8	24.1	26.9
CO	13.7	0	105.3
VOC	2.0	0	2.0

Annual PE2 Emissions (Permit S-1203-8)			
Pollutant	PE2 Combustion	PE2 Process	PE2 Total
NO_X	2455	0	2455
SO_X	401	0	401
PM_{10}	1022	8797	9819
CO	5001	0	5001
VOC	730	0	730

S-1203-12-3:

$PE2_{PM10}$ = (0.015 lb/ton) * (70 tons/day) = 1.1 lb PM_{10}/day

= (1.1 lb PM10/day) * (365 day/year) = 402 lb PM_{10}/yr

Post-project Potential to Emit (PE2): S-1203-12-3		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
PM_{10}	1.1	402

3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to District Rule 2201, the SSPE1 is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions (AER) that have occurred at the source, and which have not been used on-site.

The SSPE1, from Project S-1143491, is shown below:

SSPE1 (lb/year)					
Permit Unit	NO_X	SO_X	PM_{10}	CO	VOC
S-1203-8-7	2,455	401	7,300	5,001	730
S-1203-9-5	3,942	621	49,458	29,054	1,132
S-1203-10-1	0	0	1,205	0	0
S-1203-11-1	0	0	1,205	0	0
S-1203-12-1	0	0	301	0	0
S-1203-13-0	0	0	409	0	0
S-1203-14-0	0	0	409	0	0
S-1203-15-0	0	0	409	0	0
S-1203-17-1	22	0	1	363	78
S-1203-16-2	15,611	16,343	11,132	64,649	8,238
S-1203-20-1					
S-1203-22-0					
S-1203-21-0	0	0	5,735	0	0
S-1203-23-0	0	0	171	0	0
S-1203-24-0	96	0	5	50	12
SSPE1	22,126	17,365	77,740	99,107	10,190

4. Post Project Stationary Source Potential to Emit (SSPE2)

Pursuant to District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site.

The SSPE2 is shown below:

SSPE2 (lb/year)					
Permit Unit	NO_X	SO_X	PM_{10}	CO	VOC
S-1203-8-9	2445	401	9819	5001	730
S-1203-9-5	3,942	621	49,458	29,054	1,132
S-1203-10-1	0	0	1,205	0	0
S-1203-11-1	0	0	1,205	0	0
S-1203-12-3	0	0	402	0	0
S-1203-13-0	0	0	409	0	0
S-1203-14-0	0	0	409	0	0
S-1203-15-0	0	0	409	0	0
S-1203-17-1	22	0	1	363	78
S-1203-16-2 S-1203-20-1 S-1203-22-0	15,611	16,343	11,132	64,649	8,238
S-1203-21-0	0	0	5,735	0	0
S-1203-23-0	0	0	171	0	0
S-1203-24-0	96	0	5	50	12
SSPE2	22,126	17,365	80,360	99,107	10,190

5. Major Source Determination

Rule 2201 Major Source Determination:

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 51.165

Rule 2201 Major Source Determination (lb/year)						
	NO_X	SO_X	PM_{10}	$PM_{2.5}$	CO	VOC
SSPE1	22,126	17,365	77,740	77,740	99,107	10,190
SSPE2	22,126	17,365	80,360	80,360	99,107	10,190
Major Source Threshold	20,000	140,000	140,000	200,000	200,000	20,000
Major Source?	Yes	No	No	No	No	No

Note: PM2.5 assumed to be equal to PM10

As seen in the table above, the facility is not an existing Major Source SOx, PM_{10}, $PM_{2.5}$, CO, and VOC and is not becoming a Major Source for SOx, PM10, PM2.5, CO, and VOC as a result of this project.

This source is an existing Major Source for NOx emissions and will remain a Major Source for NOx. No change in other pollutants are proposed or expected as a result of this project.

Rule 2410 Major Source Determination:

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(iii). Therefore the PSD Major Source threshold is 250 tpy for any regulated NSR pollutant.

PSD Major Source Determination (tons/year)						
	NO2	VOC	SO2	CO	PM	PM10
Estimated Facility PE before Project Increase	11.1	5.1	8.7	49.6	38.9	38.9
PSD Major Source Thresholds	250	250	250	250	250	250
PSD Major Source ? (Y/N)	N	N	N	N	N	N

As shown above, the facility is not an existing PSD major source for any regulated NSR pollutant expected to be emitted at this facility.

6. Baseline Emissions (BE)

The BE calculation (in lb/year) is performed pollutant-by-pollutant for each unit within the project to calculate the QNEC, and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

As shown in Section VII.C.5 above, the facility is not a Major Source for PM_{10}, CO, and VOC.

Therefore BE=PE1.

As calculated in Section VII.C.1 above, PE1 is summarized in the following table:

BE (lb/year)					
	SO_X	PM_{10}	$PM_{2.5}$	CO	VOC
S-1203-8-8	401	1022	1022	5001	730
S-1203-12-3	0	192	192	0	0

a. BE NO_X

There are no NO_X Emissions associated with permit unit S-1203-12-3; therefore, BE does not apply.

Clean Emissions Unit, Located at a Major Source
Pursuant to Rule 2201, a Clean Emissions Unit is defined as an emissions unit that is "equipped with an emissions control technology with a minimum control efficiency of at least 95% or is equipped with emission control technology that meets the requirements for achieved-in-practice BACT as accepted by the APCO during the five years immediately prior to the submission of the complete application.

Permit Unit S-1203-8 is equipped with an ultra low NO_X burner, which meets the requirements for achieved-in-practice BACT. Therefore, BE=PE1.

BE = 2488 lb/year

7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

Since this facility is a major source for NOx, the project's PE2 is compared to the SB 288 Major Modification Thresholds in the following table in order to determine if the SB 288 Major Modification calculation is required.

SB 288 Major Modification Thresholds			
Pollutant	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
NO_X	2455	50,000	No
SO_X	401	80,000	No
PM_{10}	10,221	30,000	No
VOC	730	50,000	No

Since none of the SB 288 Major Modification Thresholds are surpassed with this project, this project does not constitute an SB 288 Major Modification.

8. Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

The determination of Federal Major Modification is based on a two-step test. For the first step, only the emission *increases* are counted. Emission decreases may not cancel out the increases for this determination.

Step 1

For existing emissions units, the increase in emissions is calculated as follows.

Emission Increase = PAE – BAE - UBC

Where: PAE = Projected Actual Emissions, and
BAE = Baseline Actual Emissions
UBC = Unused baseline capacity

The project's combined total emission increases are compared to the Federal Major Modification Thresholds in the following table.

Federal Major Modification Thresholds for Emission Increases			
Pollutant	Total Emissions Increases (lb/yr)	Thresholds (lb/yr)	Federal Major Modification?
NO_x*	0	0	No
VOC*	0	0	No
PM_{10}	2,729	30,000	No
$PM_{2.5}$	2,729	20,000	No
SO_x	0	80,000	No

Since none of the Federal Major Modification Thresholds are being surpassed with this project, this project does not constitute a Federal Major Modification and no further analysis is required.

9. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to any pollutant regulated under the Clean Air Act, except those for which the District has been classified nonattainment. The pollutants which must be addressed in the PSD applicability determination for sources located in the SJV and which are emitted in this project are: (See 52.21 (b) (23) definition of significant)

- NO2 (as a primary pollutant)
- SO2 (as a primary pollutant)
- CO
- PM
- PM10

I. Project Emissions Increase - New Major Source Determination

The post-project potentials to emit from all new and modified units are compared to the PSD major source thresholds to determine if the project constitutes a new major source subject to PSD requirements.

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). The PSD Major Source threshold is 250 tpy for any regulated NSR pollutant.

PSD Major Source Determination: Potential to Emit (tons/year)						
	NO2	VOC	SO2	CO	PM	PM10
Total PE from New and Modified Units	1.2	0.4	0.2	2.5	4.9	4.9
PSD Major Source threshold	250	250	250	250	250	250
New PSD Major Source?	N	N	N	N	N	N

As shown in the table above, the potential to emit for the project, by itself, does not exceed any PSD major source threshold. Therefore Rule 2410 is not applicable and no further analysis is required.

10. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are included in Appendix E.

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

Additionally, no combustion processes are being modified as a result of this project; therefore, only PM_{10} associated with the process stream of WPC will be addressed.

A. Best Available Control Technology (BACT)

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis for the following*:

a. Any new emissions unit with a potential to emit exceeding two pounds per day,
b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,

c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
d. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

a. New emissions units – PE > 2 lb/day

As discussed in Section I above, there are no new emissions units associated with this project; therefore, BACT is not triggered.

b. Relocation of emissions units – PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore BACT is not triggered.

c. Modification of emissions units – AIPE > 2 lb/day

AIPE = PE2 – HAPE

Where,
AIPE = Adjusted Increase in Permitted Emissions, (lb/day)
PE2 = Post-Project Potential to Emit, (lb/day)
HAPE = Historically Adjusted Potential to Emit, (lb/day)

HAPE = PE1 x (EF2/EF1)

Where,

PE1 = The emissions unit's Potential to Emit prior to modification or relocation, (lb/day)
EF2 = The emissions unit's permitted emission factor for the pollutant after modification or relocation. If EF2 is greater than EF1 then EF2/EF1 shall be set to 1
EF1 = The emissions unit's permitted emission factor for the pollutant before the modification or relocation

AIPE = PE2 – (PE1 * (EF2 / EF1))

S-1203-1203-8-9:

AIPE = 24.1 – [17.2 * (0.344/0.344)]
= 24.1-17.2 * 1
= 6.9 lb/day

As demonstrated above, the AIPE is greater than 2.0 lb/day for PM_{10} emissions for permit unit S-1203-8-9; therefore BACT is triggered. BACT is not triggered for any of the other criteria pollutants including: NOx, SOX, CO, and VOC's.

S-1203-1203-12-3:

AIPE = 1.1 – [0.8 * (0.015/0.015)]
= 1.1- [0.8 * 1]
= 0.3 lb/day

As demonstrated above, the AIPE is less than 2.0 lb/day for PM_{10} emissions for permit unit S-1203-12-3; therefore, BACT is not triggered. BACT is not triggered for any of the other criteria pollutants including: NOx, SOX, CO, and VOC's.

d. SB288 Major Modification

As discussed in Section VII.C.7 above, this project does not constitute a Major Modification; therefore, BACT is not triggered.

2. BACT Guideline

S-1203-8-9:

BACT Guideline 1.6.15 applies to the 15.0 MMBtu/hr direct-fired milk spray dryer burner. [Dryer – Milk Spray, < 20 MMBtu/hr] (See Appendix C)

2. Top-Down BACT Analysis

S-1203-8-9:

Per Permit Services Policies and Procedures for BACT, a Top-Down BACT analysis shall be performed as a part of the application review for each application subject to the BACT requirements pursuant to the District's NSR Rule.

Pursuant to the attached Top-Down BACT Analysis (see **Appendix D**), BACT has been satisfied with the following:

PM_{10}: PM_{10} emissions are controlled using a baghouse.

B. Offsets

1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The SSPE2 is compared to the offset thresholds in the following table.

Offset Determination (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
SSPE2	22,126	17,365	77,740	99,107	10,190
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	Yes	No	Yes	No	No

2. Quantity of Offsets Required

There is only an increase in PM_{10} emissions associated with this project. Therefore only offset requirements for PM_{10} will be evaluated.

The quantity of offsets in pounds per year for PM_{10} is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

Offsets Required (lb/year) = (Σ[PE2 – BE] + ICCE) x DOR, for all new or modified emissions units in the project,

Where,
PE2 = Post Project Potential to Emit, (lb/year)
BE = Baseline Emissions, (lb/year)
ICCE = Increase in Cargo Carrier Emissions, (lb/year)
DOR = Distance Offset Ratio, determined pursuant to Section 4.8

BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, Located at a Major Source.

otherwise,

BE = HAE

The facility is below the Major Source threshold for PM_{10}; therefore BE = PE1. Also, there are no increases in cargo carrier emissions; therefore offsets can be determined as follows:

S-1203-8-9:

Offsets Required (lb/year) = ([PE2 – BE] + ICCE) x DOR

PE2 (PM_{10}) = 9,819 lb/year
BE (PM_{10}) = 7300 lb/year
ICCE = 0 lb/year

The original location of the proposed emissions offsets was more than 15 miles Saputo Cheese; therefore, the distance offset ratio is 1.5 to 1.0. The total amount of PM_{10} ERCs that need to be withdrawn is:

Offsets Required (lb/year) = ([9819 - 7300 + 0) x 1.5
= 2519 x 1.5
= 3779 lb PM_{10}/year

Quarterly offsets required (lb/qtr) = (3779 lb PM_{10}/year) ÷ (4 quarters/year)
= 944.75 lb PM_{10}/qtr

S-1203-12-3:

IPE = PE2 – PE1
IPE = 1.1 lb-PM_{10}/day – 0.8 lb-PM_{10}/day
IPE = 0.3 lb-PM_{10}/day

Per District Policy, APR 1130, Increases in Maximum Daily Permitted Emissions of Less than or Equal to 0.5 lb/day, a daily increase in permitted emissions of any criteria pollutant of less than or equal to 0.5 lb/day per permit unit is rounded to zero (0) lb/day, only for the purposes of determining whether New and Modified Source Review (NSR) rule requirements are triggered. Therefore, there are no offset requirements for permit unit S-1203-12-3.

S-1203-8-9:

As shown in the calculation above, the quarterly amount of offsets required for this project, when evenly distributed to each quarter, results in fractional pounds of offsets being required each quarter. Since offsets are required to be withdrawn as whole pounds, the quarterly amounts of offsets need to be adjusted to ensure the quarterly values sum to the total annual amount of offsets required.

To adjust the quarterly amount of offsets required, the fractional amount of offsets required in each quarter will be summed and redistributed to each quarter based on the number of days in each quarter. The redistribution is based on the Quarter 1 having the fewest days and the Quarters 3 and 4 having the most days. The redistribution method is summarized in the following table:

Redistribution of Required Quarterly Offsets (where X is the annual amount of offsets, and X ÷ 4 = Y.z)				
Value of z	Quarter 1	Quarter 2	Quarter 3	Quarter 4
.0	Y	Y	Y	Y
.25	Y	Y	Y	Y+1
.5	Y	Y	Y+1	Y+1
.75	Y	Y+1	Y+1	Y+1

Therefore the appropriate quarterly emissions to be offset are as follows:

ATC	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total Annual
S1203-8-9	944	945	945	945	3779

The applicant has stated that the facility plans to use SOx ERC certificate N-1195-5 to offset the increases in PM_{10} emissions associated with this project. District Rule 2201, Section 4.13.3.1.2 states, "interpollutant offsets between PM10 and PM10 precursors may be allowed". SOx is a Precursor for PM_{10}. District Draft Policy, APR 14XX, Interpollutant Offset Ratio sets an interpollutant offset ration of 1:1 for SOx to PM. The above certificate has available quarterly SOx credits as follows:

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
ERC #N-1195-5	945	945	945	945

As seen above, the facility has sufficient credits to fully offset the quarterly PM_{10} emissions increases associated with this project.

Proposed Rule 2201 (offset) Conditions:

- {GC# 4447 - edited} Prior to operating equipment under this Authority to Construct, permittee shall surrender PM_{10} emission reduction credits for the following quantity of emissions: 1st quarter – 944 lb, 2nd quarter - 945 lb, 3rd quarter - 945 lb, and fourth quarter – 945 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]

- ERC Certificate Number N-1195-5 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]

C. Public Notification

1. Applicability

Public noticing is required for:
a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
c. Any project which results in the offset thresholds being surpassed, and/or
d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.
e. Any project which results in a Title V significant permit modification

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

As demonstrated in Sections VII.C.7 and VII.C.8, this project does not constitute an SB 288 or Federal Major Modification; therefore, public noticing for SB 288 or Federal Major Modification purposes is not required.

b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. There are no new emissions units associated with this project. Therefore public noticing is not required for this project for PE > 100 lb/day.

c. Offset Threshold

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

Offset Thresholds				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO_X	22,126	22,126	20,000 lb/year	No
SO_X	17,365	17,365	54,750 lb/year	No
PM_{10}	77,740	80,360	29,200 lb/year	No
CO	99,107	99,107	200,000 lb/year	No
VOC	10,190	10,190	20,000 lb/year	No

As detailed above, there were no thresholds surpassed with this project; therefore public noticing is not required for offset purposes.

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

SSIPE Public Notice Thresholds					
Pollutant	SSPE2 (lb/year)	SSPE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO_x	22,126	22,126	0	20,000 lb/year	No
SO_x	17,365	17,365	0	20,000 lb/year	No
PM_{10}	80,360	77,740	2,620	20,000 lb/year	No
CO	99,107	99,107	0	20,000 lb/year	No
VOC	10,190	10,190	0	20,000 lb/year	No

e. Title V Significant Permit Modification

As shown in the Discussion of Rule 2520 below, this project does not constitute a Title V significant modification. Therefore, public noticing for Title V significant modifications is not required for this project.

2. Public Notice Action

As discussed above, this project will not result in emissions, for any pollutant, which would subject the project to any of the noticing requirements listed above. Therefore, public notice will not be required for this project.

D. Daily Emission Limits (DELs)

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.15 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. Per Sections 3.15.1 and 3.15.2, the DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

Proposed Rule 2201 (DEL) Conditions:

S-1203-8-7:

- Non-combustion PM10 emissions from baghouse shall not exceed 0.344 lb/ton. [District Rules 2201 and 4202] N

- Maximum daily productions of the Whey Protein Concentrate (WPC) shall not exceed 70 ton/day. [District Rule 2201] N

S-1203-12-3:

- PM10 emissions from bin vent filters shall not exceed 0.015 lb/ton of powder conveyed into silo. [District Rules 2201, 4201, and 4202] N

- Maximum quantity of dried whey powder conveyed into silo shall not exceed 70tons/day. [District Rules 2201 and 4202] N

E. Compliance Assurance

1. Source Testing

Pursuant to District Policy APR 1705, source testing is not required to demonstrate compliance with Rule 2201.

2. Monitoring

No monitoring is required to demonstrate compliance with Rule 2201.

3. Recordkeeping

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following conditions will appear on the permit to operate:

S-1203-8-9:

- Daily log of WPC production shall be maintained, kept, and made available for District inspection upon request. [District Rule 2201] N

- All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306 and 4309] N

S-1203-12-3:

- Permittee shall maintain a daily record of the quantity of dry powder conveyed into the silo. Records shall be kept for a period of two years and made available for District inspection upon request. [District Rule 2201] N

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

Rule 2410 Prevention of Significant Deterioration

As shown in Section VII. C. 9. above, this project does not result in a new PSD major source or PSD major modification. No further discussion is required.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit.

In accordance with Rule 2520, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
   a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
   b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

As discussed above, the facility has applied for a Certificate of Conformity (COC). Therefore, the facility must apply to modify their Title V permit with an administrative amendment prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility may construct/operate under the ATC upon submittal of the Title V administrative amendment/minor modification application.

Rule 4101 Visible Emissions

Per Section 5.0, no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity). The following condition will be added to each permit to assure compliance with this rule.

- *{15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]*

Rule 4102 Nuisance

Rule 4102 states that no air contaminant shall be released into the atmosphere which causes a public nuisance. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, the following condition will be listed on each permit to ensure compliance:

- {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – Risk Management Policy for Permitting New and Modified Sources specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

This modification is not expected to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Emissions of toxic air contaminants are not expected to increase from the proposed operations which provides a product that is consumed by humans; therefore, a health risk assessment is not required

Rule 4201 Particulate Matter Concentration

S-1203-8-9:

The two burners listed on this permit unit have a PM_{10} emissions factor of 0.0076 lb-PM_{10}/MMBtu.

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot.

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot.
F-Factor for Natural Gas: 8,710 dscf/MMBtu at 68 °F, equivalent to

$$Corrected\ F-factor = \left(\frac{8{,}710 dscf}{MMBtu}\right) \times \left(\frac{60^{o}F + 459.6}{68^{o}F + 459.6}\right) = 8{,}578 \frac{dscf}{MMBtu}\ \ at\ 60^{o}F$$

PM_{10} Emission Factor: 0.0076 lb-PM_{10}/MMBtu
Percentage of PM as PM_{10} in Exhaust: 100%
Exhaust Oxygen (O_2) Concentration: 3%

$$\text{Excess Air Correction to F Factor} = \frac{20.9}{(20.9 - 3)} = 1.17$$

$$GL = \left(\frac{0.0076\ lb-PM}{MMBtu} \times \frac{7{,}000\ grain}{lb-PM}\right) / \left(\frac{8{,}578\ ft^3}{MMBtu} \times 1.17\right)$$

$$GL = 0.0053\ grain/dscf << 0.1\ grain/dscf$$

Therefore, compliance with District Rule 4201 requirements is expected and the following permit condition will be listed on each permit as follows:

- *{14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]*

S-1203-12-1

The silos and bagging systems are equipped with cyclones, fabric filters and/or wet scrubber minimizing particulates emissions.

Particulate matter emissions in excess of 0.1 grains/dscf in concentration are not expected. Compliance with this rule is expected for equipment proposed in this project.

Rule 4202 Particulates Emission Rate

The allowable particulate emission rate is calculated pursuant to the following equation:

$E = 3.59(P)^{\wedge 0.62}$; where P is not greater than 30 ton/hr
E = allowable emission rate (lb/hr)
P = process weight rate in tons/hr

Permit Unit	Process rate (ton/hr)[a]	Allowable emission Rate E, (lb/hr)	Maximum Emission Rate (lb/hr)[b]
S-1203-8-9	2.92	6.98	1.00
S-1203-12-1	2.92	6.98	0.05

[a] The process rates are calculated based on the daily maximum capacity of the equipment divided by 24 hour per day
[b] Maximum emission rates are based on DEL's.

As shown on the above table, these units emit particulates emissions well below the maximum allowable rates. Compliance with this rule is expected.

Rule 4301 Fuel Burning Equipment

S-1203-8-9:

This rule specifies maximum emission rates in lb/hr for SO_2, NO_2, and combustion contaminants (defined as total PM in Rule 1020). This rule also limits combustion contaminants to $\leq$ 0.1 gr/scf. According to AP 42 (Table 1.4-2, footnote c), all PM emissions from natural gas combustion are less than 1 μm in diameter. The unit is currently in compliance with the rule and continued compliance is expected.

District Rule 4305 Boilers, Steam Generators and Process Heaters – Phase 2

S-1203-8-9:

This unit is subject to District Rule 4305, *Boilers, Steam Generators and Process Heaters – Phase 2.* In addition, the unit is also subject to District Rule 4320.

Since emissions limits of Rule 4320 and all other requirements are equivalent or more stringent than District Rule 4305 requirements, compliance with District Rule 4320 requirements will satisfy requirements of District Rule 4305.

Therefore, compliance with District Rule 4305 requirements is expected and no further discussion is required.

S-1203-12-3:

This unit is not subject to this rule.

District Rule 4306 Boilers, Steam Generators and Process Heaters – Phase 3

S-1203-8-9:

This unit is subject to District Rule 4306, *Boilers, Steam Generators and Process Heaters – Phase 3.* In addition, this unit is also subject to District Rule 4320.

Since emissions limits of District Rule 4320 and all other requirements are equivalent or more stringent than District Rule 4306 requirements, compliance with District Rule 4320 requirements will satisfy requirements of District Rule 4306.

Therefore, compliance with District Rule 4306 requirements is expected and no further discussion is required.

S-1203-12-3:

This unit is not subject to this rule.

Rule 4309 Dryers Dehydrators, and Ovens

S-1203-8-9:

The facility has one dryer with two burners (only one to be used at any time). When using the direct-fired burner, the dryer is subject to the requirements of this rule.

There are no proposed changes to the direct-fired burner in this project. Therefore continued compliance with Rule 4309 is expected.

S-1203-12-1

This unit is not subject to the requirements of this rule.

Rule 4320 – Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBtu/hr

S-1203-8-9:

This rule applies to any gaseous fuel or liquid fuel fired boiler, steam generator, or process heater with a total rated heat input greater than 5 million Btu per hour. The unit is currently in compliance with this rule and continued compliance is expected.

S-1203-12-1:

Rule 4320 is not applicable for this permit unit.

District Rule 4801 Sulfur Compounds

A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 % by volume calculated as SO_2, on a dry basis averaged over 15 consecutive minutes.

Using the ideal gas equation and the emission factors presented in Section VII, the sulfur compound emissions are calculated as follows:

Volume $SO_2 = \frac{n\,RT}{P}$

With:

N = moles SO_2
T (Standard Temperature) = 60°F = 520°R
P (Standard Pressure) = 14.7 psi
R (Universal Gas Constant) = $\frac{10.73\,psi \cdot ft^3}{lb \cdot mol \cdot °R}$

$$\frac{0.00285\,lb-SOx}{MMBtu} \times \frac{MMBtu}{8{,}578\,dscf} \times \frac{1\,lb \cdot mol}{64\,lb} \times \frac{10.73\,psi \cdot ft^3}{lb \cdot mol \cdot °R} \times \frac{520°R}{14.7\,psi} \times \frac{1{,}000{,}000 \cdot parts}{million} = 2.0\frac{parts}{million}$$

$SulfurConcentration = 2.0\frac{parts}{million}$ < 2,000 ppmv (or 0.2%)

Therefore, compliance with District Rule 4801 requirements for this unit is expected.

Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

CEQA requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The District adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
- Identify the ways that environmental damage can be avoided or significantly reduced;

- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Greenhouse Gas (GHG) Significance Determination

District is a Lead Agency & GHG emissions increases are from the combustion of fossil fuel other than jet fuels

It is determined that no other agency has prepared or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project.

On December 17, 2009, the District's Governing Board adopted a policy, APR 2005, *Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency,* for addressing GHG emission impacts when the District is Lead Agency under CEQA and approved the District's guidance document for use by other agencies when addressing GHG impacts as lead agencies under CEQA. Under this policy, the District's determination of significance of project-specific GHG emissions is founded on the principal that projects with GHG emission reductions consistent with AB 32 emission reduction targets are considered to have a less than significant impact on global climate change. Consistent with District Policy 2005, projects complying with an approved GHG emission reduction plan or GHG mitigation program, which avoids or substantially reduces GHG emissions within the geographic area in which the project is located, would be determined to have a less than significant individual and cumulative impact for GHG emission.

The California Air Resources Board (ARB) adopted a Cap-and-Trade regulation as part one of the strategies identified for AB 32. This Cap-and-Trade regulation is a statewide plan, supported by a CEQA compliant environmental review document, aimed at reducing or mitigating GHG emissions from targeted industries. Facilities subject to the Cap-and-Trade regulation are subject to an industry-wide cap on overall GHG emissions. Any growth in emissions must be accounted for under that cap such that a corresponding and equivalent reduction in emissions must occur to allow any increase. Further, the cap decreases over time, resulting in an overall decrease in GHG emissions.

Under District policy APR 2025, *CEQA Determinations of Significance for Projects Subject to ARB's GHG Cap-and-Trade Regulation*, the District finds that the Cap-and-Trade is a regulation plan approved by ARB, consistent with AB32 emission reduction targets, and supported by a CEQA compliant environmental review document. As such, consistent with District Policy 2005, projects complying project complying with Cap-and-Trade requirements are determined to have a less than significant individual and cumulative impact for GHG emissions.

The GHG emissions increases associated with this project result from the combustion of fossil fuel(s), other than jet fuel, delivered from suppliers subject to the Cap-and-Trade regulation. Therefore, as discussed above, consistent with District Policies APR 2005

and APR 2025, the District concludes that the GHG emissions increases associated with this project would have a less than significant individual and cumulative impact on global climate change.

District CEQA Findings

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15301 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Issue Authority(s) to Construct S-1203-8-9, and S-1203-12-3 subject to the permit conditions on each attached draft Authority to Construct in Appendix B.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-1203-8-9	3020-02-H	15.4 MMBtu/hr	$1030
S-1203-12-3	3020-05-C	26,162 gallons	$135

Appendices

A: Current PTO's
B: Draft ATC's
C: BACT Guideline 1.6.15
D: Top-Down BACT Analysis
E: Emissions Profile's

Appendix A
Current PTO's

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1203-8-8 **EXPIRATION DATE:** 01/31/2019

SECTION: SW14 **TOWNSHIP:** 20S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
NIRO INC. MULTI-STAGE TYPE MSD 500 SPRAY DRYER WITH 15.0 MMBTU/HR NATURAL GAS/LPG DIRECT-FIRED MAXON ULTRA LOW NOX CROSSFIRE LINE BURNER AND 15.4 MMBTU/HR NATURAL GAS/LPG INDIRECT-FIRED TODD RAPID MIX ULTRA LOW NOX BURNER AND FGR, FEED SYSTEM INDIRECT HOT AIR SYSTEM, DRYING CHAMBER, EXHAUST AIR SYSTEM WITH FLUIDIZER ASSEMBLY, CYCLONE AND BAGHOUSE FILTER

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the indirect-fired TODD RMB burner. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the indirect-fired TODD RMB burner as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required for the indirect-fired TODD RMB burner. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of the indirect-fired TODD RMB burner, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of the indirect-fired TODD RMB burner, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that the indirect-fired TODD RMB burner is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rules 1070 and 2520] Federally Enforceable Through Title V Permit
7. The dryer shall only be fired on natural gas with LPG as a backup fuel. [District Rules 2201, 4201, 4301, 4320, and 4801] Federally Enforceable Through Title V Permit
8. Permittee shall determine sulfur content of the natural gas combusted in the indirect-fired burner annually or shall demonstrate that the natural gas combusted is provided from a PUC or FERC regulated source. Permittee shall also determine sulfur content of the LPG combusted in the indirect-fired burner annually or shall demonstrate that the LPG combusted is provided from a commercial LPG source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit
9. Emissions from fuel combustion when using the indirect-fired TODD RMB burner shall not exceed the following: NOx: 9 ppmv @ 3% O2 or 0.011 lb/MMBtu, CO: 0.037 lb/MMBtu, VOC: 0.0055 lb/MMBtu, PM10: 0.0076 lb/MMBtu, or SOx (calculated as SO2) 0.0029 lb/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Emissions from fuel combustion when using the direct-fired Maxon burner shall not exceed the following: NOx: 2.2 ppmv @ stack conditions (if > 19% O2, otherwise corrected to 19% O2) or 0.0243 lb/MMBtu, CO: 42 ppmv @ 19% O2 (if > 19% O2, otherwise corrected to 19% O2) or 0.2924 lb/MMBtu, VOC: 0.0055 lb/MMBtu, PM10: 0.0076 lb/MMBtu, or SOx (calculated as SO2) 0.0029 lb/MMBtu. [District Rules 2201 and 4309] Federally Enforceable Through Title V Permit
11. Non-combustion PM10 emissions from baghouse shall not exceed 0.344 lb/ton. [District Rules 2201 and 4202] Federally Enforceable Through Title V Permit
12. Maximum daily productions of the Whey Protein Concentrate (WPC) shall not exceed 50 ton/day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, 4309, and 4320] Federally Enforceable Through Title V Permit
14. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320 (adopted 10/16/2008). [District Rules 4305, 4306, 4309, and 4320] Federally Enforceable Through Title V Permit
15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, 4309, and 4320] Federally Enforceable Through Title V Permit
16. Source testing of the indirect-fired TODD RMB burner to measure natural gas-combustion NOx and CO emissions shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
17. Source testing of the direct-fired Maxon burner to measure natural gas-combustion NOx and CO emissions shall be conducted within 60 days of initial start-up using the Maxon burner and at least once every 24 months thereafter. [District Rules 2201 and 4309] Federally Enforceable Through Title V Permit
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
20. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, 4309, and 4320] Federally Enforceable Through Title V Permit
21. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, 4309, and 4320] Federally Enforceable Through Title V Permit
22. When testing the emissions while operating with the direct-fired Maxon burner, all test results for NOx and CO shall be reported in ppmv @ 19% O2 (or no correction if measured above 19% O2), corrected to dry stack conditions. [District Rule 4309] Federally Enforceable Through Title V Permit
23. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, 4309, and 4320] Federally Enforceable Through Title V Permit
24. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, 4309, and 4320] Federally Enforceable Through Title V Permit

26. When operating the dryer with the indirect-fired TODD burner, if either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

27. When operating the dryer with the direct-fired Maxon burner, if either the NOx or CO concentrations corrected to 19% O2 (or no correction if measured above 19% O2), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4309] Federally Enforceable Through Title V Permit

28. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, 4309, and 4320] Federally Enforceable Through Title V Permit

29. When operating the dryer with the indirect-fired TODD burner, the permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

30. When operating the dryer with the direct-fired Maxon burner, the permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 19% O2 (or no correction if measured above 19% O2), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range [District Rule 4309] Federally Enforceable Through Title V Permit

31. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit

32. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit

33. Visible emissions from baghouse shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit

35. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit

36. Daily log of WPC productions shall be maintained, kept, and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

37. Visible emissions from the source during operation shall be evaluated using EPA method 22 at least once per calendar quarter. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions. If visible emissions cannot be eliminated within 24 hours, a visible emissions test using EPA Method 9 shall be conducted. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

38. Records of visible emissions monitoring results shall be maintained and retained for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit

39. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes, or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

40. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit

41. Permittee shall maintain records of the type and amount of each fuel combusted in the indirect-fired burner during each calendar month. [40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit

42. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, 9.4.2, 4305, 4306, 4309, and 4320 and 40 CFR 60.48c(i)] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1203-12-2 **EXPIRATION DATE:** 01/31/2019

SECTION: SW14 **TOWNSHIP:** 20S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
26,162 GALLON (3,500 CU. FT.) WHEY POWDER STORAGE SILO "C" WITH BIN VENT, 3 HP POWDER SILO BIN DISCHARGER, 2 HP BIN VENT EXHAUST FAN, AND 1 HP CONVEY-THRU ROTARY AIRLOCK

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
2. PM10 emissions from bin vent filters shall not exceed 0.015 lb/ton of powder conveyed into silo. [District Rules 2201, 4201, and 4202] Federally Enforceable Through Title V Permit
3. Maximum quantity of dried whey powder conveyed into silo shall not exceed 55 tons/day. [District Rules 2201 and 4202] Federally Enforceable Through Title V Permit
4. Visible emissions from the source during operation shall be evaluated using EPA method 22 at least once per calendar quarter. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions. If visible emissions cannot be eliminated within 24 hours, a visible emissions test using EPA Method 9 shall be conducted. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. Records of visible emissions monitoring results shall be maintained and retained for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
6. Permittee shall perform a complete vent filter inspection on an annual basis. Dust collector filters shall be inspected thoroughly for tears, scuffs, abrasions, holes, or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Records of vent filter maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
8. Permittee shall maintain a daily record of the quantity of dry powder conveyed into the silo. Records shall be kept for a period of five years and made available for District inspection upon request. [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

Appendix B
Draft ATC's

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1203-8-9 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: SAPUTO CHEESE USA INC
MAILING ADDRESS: 800 E PAIGE AVE
TULARE, CA 93274

LOCATION: 800 E PAIGE AVE
TULARE, CA 93274

SECTION: SW14 **TOWNSHIP:** 20S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
MODIFICATION OF NIRO INC. MULTI-STAGE TYPE MSD 500 SPRAY DRYER WITH 15.0 MMBTU/HR NATURAL GAS/LPG DIRECT-FIRED MAXON ULTRA LOW NOX CROSSFIRE LINE BURNER AND 15.4 MMBTU/HR NATURAL GAS/LPG INDIRECT-FIRED TODD RAPID MIX ULTRA LOW NOX BURNER AND FGR, FEED SYSTEM INDIRECT HOT AIR SYSTEM, DRYING CHAMBER, EXHAUST AIR SYSTEM WITH FLUIDIZER ASSEMBLY, CYCLONE AND BAGHOUSE FILTER: INCREASE DAILY PRODUCTION OF WHEY PROTEIN CONCENTRATE TO 70 TONS/DAY

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender SOx emission reduction credits for the following quantity of emissions: 1st quarter - 944 lb, 2nd quarter - 945 lb, 3rd quarter - 945 lb, and fourth quarter - 945 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services
S-1203-8-9 : Feb 25 2015 8:29AM -- DAVIDSOS : Joint Inspection NOT Required

4. ERC Certificate Number N-1195-5 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
6. While dormant, the fuel line shall be physically disconnected from the indirect-fired TODD RMB burner. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Permittee shall submit written notification to the District upon designating the indirect-fired TODD RMB burner as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
8. While dormant, normal source testing shall not be required for the indirect-fired TODD RMB burner. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Upon recommencing operation of the indirect-fired TODD RMB burner, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Any source testing required by this permit shall be performed within 60 days of recommencing operation of the indirect-fired TODD RMB burner, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Records of all dates and times that the indirect-fired TODD RMB burner is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rules 1070 and 2520] Federally Enforceable Through Title V Permit
12. The dryer shall only be fired on natural gas with LPG as a backup fuel. [District Rules 2201, 4201, 4301, 4320, and 4801] Federally Enforceable Through Title V Permit
13. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
14. Permittee shall determine sulfur content of the natural gas combusted in the indirect-fired burner annually or shall demonstrate that the natural gas combusted is provided from a PUC or FERC regulated source. Permittee shall also determine sulfur content of the LPG combusted in the indirect-fired burner annually or shall demonstrate that the LPG combusted is provided from a commercial LPG source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit
15. Emissions from fuel combustion when using the indirect-fired TODD RMB burner shall not exceed the following: NOx: 9 ppmv @ 3% O2 or 0.011 lb/MMBtu, CO: 0.037 lb/MMBtu, VOC: 0.0055 lb/MMBtu, PM10: 0.0076 lb/MMBtu, or SOx (calculated as SO2) 0.0029 lb/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
16. Emissions from fuel combustion when using the direct-fired Maxon burner shall not exceed the following: NOx: 2.2 ppmv @ stack conditions (if > 19% O2, otherwise corrected to 19% O2) or 0.0243 lb/MMBtu, CO: 42 ppmv @ 19% O2 (if > 19% O2, otherwise corrected to 19% O2) or 0.2924 lb/MMBtu, VOC: 0.0055 lb/MMBtu, PM10: 0.0076 lb/MMBtu, or SOx (calculated as SO2) 0.0029 lb/MMBtu. [District Rules 2201 and 4309] Federally Enforceable Through Title V Permit
17. Non-combustion PM10 emissions from baghouse shall not exceed 0.344 lb/ton. [District Rules 2201 and 4202] Federally Enforceable Through Title V Permit
18. Maximum daily production of the Whey Protein Concentrate (WPC) shall not exceed 70 ton/day. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, 4309, and 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320 (adopted 10/16/2008). [District Rules 4305, 4306, 4309, and 4320] Federally Enforceable Through Title V Permit

21. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, 4309, and 4320] Federally Enforceable Through Title V Permit

22. Source testing of the indirect-fired TODD RMB burner to measure natural gas-combustion NOx and CO emissions shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

23. Source testing of the direct-fired Maxon burner to measure natural gas-combustion NOx and CO emissions shall be conducted within 60 days of initial start-up using the Maxon burner and at least once every 24 months thereafter. [District Rules 2201 and 4309] Federally Enforceable Through Title V Permit

24. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

25. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

26. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, 4309, and 4320] Federally Enforceable Through Title V Permit

27. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, 4309, and 4320] Federally Enforceable Through Title V Permit

28. When testing the emissions while operating with the direct-fired Maxon burner, all test results for NOx and CO shall be reported in ppmv @ 19% O2 (or no correction if measured above 19% O2), corrected to dry stack conditions. [District Rule 4309] Federally Enforceable Through Title V Permit

29. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, 4309, and 4320] Federally Enforceable Through Title V Permit

30. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320] Federally Enforceable Through Title V Permit

31. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, 4309, and 4320] Federally Enforceable Through Title V Permit

32. When operating the dryer with the indirect-fired TODD burner, if either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

33. When operating the dryer with the direct-fired Maxon burner, if either the NOx or CO concentrations corrected to 19% O2 (or no correction if measured above 19% O2), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4309] Federally Enforceable Through Title V Permit

34. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, 4309, and 4320] Federally Enforceable Through Title V Permit

35. When operating the dryer with the indirect-fired TODD burner, the permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

36. When operating the dryer with the direct-fired Maxon burner, the permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 19% O2 (or no correction if measured above 19% O2), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range [District Rule 4309] Federally Enforceable Through Title V Permit

37. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit

38. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit

39. Visible emissions from baghouse shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit

40. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit

41. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit

42. Daily log of WPC productions shall be maintained, kept, and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

43. Visible emissions from the source during operation shall be evaluated using EPA method 22 at least once per calendar quarter. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions. If visible emissions cannot be eliminated within 24 hours, a visible emissions test using EPA Method 9 shall be conducted. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

44. Records of visible emissions monitoring results shall be maintained and retained for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

45. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes, or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

46. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit

47. Permittee shall maintain records of the type and amount of each fuel combusted in the indirect-fired burner during each calendar month. [40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit

48. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, 9.4.2, 4305, 4306, 4309, and 4320 and 40 CFR 60.48c(i)] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1203-12-3 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: SAPUTO CHEESE USA INC
MAILING ADDRESS: 800 E PAIGE AVE
TULARE, CA 93274

LOCATION: 800 E PAIGE AVE
TULARE, CA 93274

SECTION: SW14 **TOWNSHIP:** 20S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 26,162 GALLON (3,500 CU. FT.) WHEY POWDER STORAGE SILO "C" WITH BIN VENT, 3 HP POWDER SILO BIN DISCHARGER, 2 HP BIN VENT EXHAUST FAN, AND 1 HP CONVEY-THRU ROTARY AIRLOCK: INCREASE DAILY THROUGHPUT OF WHEY PROTEIN CONCENTRATE TO 70 TONS/DAY

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
4. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
5. PM10 emissions from bin vent filters shall not exceed 0.015 lb/ton of powder conveyed into silo. [District Rules 2201, 4201, and 4202] Federally Enforceable Through Title V Permit
6. Maximum quantity of dried whey powder conveyed into silo shall not exceed 70 tons/day. [District Rules 2201 and 4202] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services
S-1203-12-3 : Feb 25 2015 8:29AM -- DAVIDSOS : Joint Inspection NOT Required

7. Visible emissions from the source during operation shall be evaluated using EPA method 22 at least once per calendar quarter. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions. If visible emissions cannot be eliminated within 24 hours, a visible emissions test using EPA Method 9 shall be conducted. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

8. Records of visible emissions monitoring results shall be maintained and retained for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit

9. Permittee shall perform a complete vent filter inspection on an annual basis. Dust collector filters shall be inspected thoroughly for tears, scuffs, abrasions, holes, or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

10. Records of vent filter maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit

11. Permittee shall maintain a daily record of the quantity of dry powder conveyed into the silo. Records shall be kept for a period of five years and made available for District inspection upon request. [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

Appendix C
BACT Guideline 1.6.15

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 1.6.15*

Last Update: 8/4/1999

Dryer - Milk Spray, < 20 MMBtu/hr

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
PM10	Baghouse and natural gas fuel with LPG as backup fuel		
NOx	20 ppmv Low NOx burner fired on natural gas with LPG as backup fuel	9 ppmv NOx @ 3% O2 Selective Catalytic Reduction, Low Temperature Oxidation, or equal.	

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in s a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source**

Appendix D
Top-Down BACT Analysis

PM_{10} Top-Down BACT Analysis

PM_{10} will be emitted from the milk spray drying operation as a result of the drying process. BACT is not triggered for the combustion units associated with this project

Step 1 - Identify All Possible Control Technologies

- Baghouse

No technologically feasible or Alternate Basic Equipment options are listed in the guideline.

Step 2 - Eliminate Technologically Infeasible Options

The control option listed in step 1 is technologically feasible.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Since only one option is listed, ranking is not necessary.

Step 4 - Cost Effectiveness Analysis

Per the District's BACT policy (section IX.D.3), a cost effective analysis is not required for control technology that is deemed as achieved in practice.

Step 5 - Select BACT

The most effective PM_{10} control option not eliminated in step 4 is a baghouse. The applicant proposes no changes in the current use of a baghouse as a PM_{10} emissions control. Therefore, the applicant's proposal for controlling PM_{10} emissions meets BACT requirements.

Appendix E
QNEC and Emissions Profile's

Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC shall be calculated as follows:

QNEC = PE2 - PE1, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.
PE2 = Post Project Potential to Emit for each emissions unit, lb/qtr.
PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

S-1203-8: Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO_X	614	614	0
SO_X	100	100	0
PM_{10}	2455	1825	630
CO	1250	1250	0
VOC	183	183	0

S-1203-12: Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO_X	0	0	0
SO_X	0	0	0
PM_{10}	101	48	53
CO	0	0	0
VOC	0	0	0

Application Emissions

Permit #: S-1203-8-9	**Last Updated**	
Facility: SAPUTO CHEESE USA INC	01/28/2015	DAVIDSOS

Equipment Pre-Baselined: NO

	NOX	SOX	PM10	CO	VOC
Potential to Emit (lb/Yr):	2455.0	401.0	9819.0	5001.0	730.0
Daily Emis. Limit (lb/Day)	6.7	1.1	44.1	13.7	2.0
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	630.0	0.0	0.0
Q2:	0.0	0.0	630.0	0.0	0.0
Q3:	0.0	0.0	630.0	0.0	0.0
Q4:	0.0	0.0	630.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Application Emissions

Permit #: S-1203-12-3	**Last Updated**
Facility: SAPUTO CHEESE USA INC	01/28/2015 DAVIDSOS

Equipment Pre-Baselined: NO

	NOX	SOX	PM10	CO	VOC
Potential to Emit (lb/Yr):	0.0	0.0	401.0	0.0	0.0
Daily Emis. Limit (lb/Day)	0.0	0.0	1.1	0.0	0.0
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	53.0	0.0	0.0
Q2:	0.0	0.0	53.0	0.0	0.0
Q3:	0.0	0.0	53.0	0.0	0.0
Q4:	0.0	0.0	53.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					